

CLAIMS

1. Electronic control system for a submarine actuator, said actuator comprising a container body from which a drive shaft projects that is suitable for inserting in
5 a seat of said submarine device, ~~characterised in that~~ said system comprises an electronic control board for at least one electric motor, arranged inside said
~~container body suitable for moving said drive shaft,~~
said electronic board being suitable for receiving an
10 electrical control signal for said actuator, generated by a remote control station,
characterised in that
said actuator comprises two electric motors associated
with said drive shaft and said electronic control board
15 is suitable for controlling each motor independently
from the other.
2. System according to claim 1, further comprising an electronic transducer for detecting the position of such a drive shaft electrically connected with said
20 programmable logic unit.
3. System according to claim 1, wherein said control board comprises a pilot circuit, for said at least one motor, a power supply circuit and a programmable logic unit.

~~4. System according to claim 1, wherein said actuator comprises two electric motors associated with said drive shaft and said electronic control board is suitable for controlling each motor independently from~~
5 ~~the other.~~

4 5. System according to claim 1, wherein said electronic control board comprises a first retroaction circuit of the current absorbed by the motor between the programmable logic unit and the pilot circuit and a
10 second pilot circuit of the position signal of the drive shaft between said transducer and said programmable logic unit.

5 6. System according to claim 4 5, wherein said control board is suitable for processing the signals
15 coming from the position transducer from a control input and from the pilot circuit, in order to generate an activation signal of said at least one electric motor.

6 7. System according to claim 5 6, wherein said
20 processing comprises calculating a speed value and direction for the rotation of the motor, starting from a position value of the drive shaft to be reached and from the current position of the shaft detected by said transducer, and sending a corresponding signal to the

pilot circuit of the motor.

7 8. System according to claim 1, wherein said electronic control board comprises a filtering block of said control signal that compares the value of the
5 signal received with an average of a predetermined number of previous control signals.

8 9. System according to claim 2, wherein said control board carries out a comparison between the signal
received by the transducer and a predetermined number
10 of previous memorised signals corresponding to the limit positions of the movement of the drive shaft, and, from subsequent processing through a linearisation function, determines a decoded position signal.

9 ~~10~~. System according to claim 1 4, wherein said
15 electronic control board is suitable for selecting which electric motor controls the shaft and in the case of an anomaly it is able to switch from one motor to the other.